

Important Advances in Clinical Medicine

Epitomes of Progress — Allergy

The Scientific Board of the California Medical Association presents the following inventory of items of progress in allergy. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in allergy which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Allergy of the California Medical Association and the summaries were prepared under its direction.

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Diseases Associated With High Levels of Immunoglobulin E

ALTHOUGH NOT measuring specific antibodies, the finding of an elevated serum level of total immunoglobulin E (IgE) of greater than 50 IU per ml may have diagnostic and therapeutic implications. For example, IgE levels greater than 400 IU per ml are found in more than 75 percent of patients with atopic dermatitis. The levels tend to be even higher with more severe disease or with coexistent asthma. Modestly elevated IgE levels have also been reported in conjunction with other dermatologic conditions such as neurodermatitis, contact dermatitis, dyshidrotic dermatitis, psoriasis, urticaria, alopecia areata and burns.

Although modestly elevated IgE levels are often found in patients with extrinsic asthma and are sometimes observed in patients with allergic rhinitis without asthma or eczema, levels found in these patients overlap those found in patients with nonatopic nasal and chest symptoms. Consequently, the total serum IgE level by itself does not reliably differentiate between allergic and non-allergic respiratory symptoms. Total serum IgE levels of less than 50 IU per ml do not exclude

demonstrable specific IgE in specific patients with rhinitis, asthma or eczema.

Serum IgE levels greater than 500 IU per ml are characteristically found in patients with active helminthic infections involving organisms with a prominent tissue phase, such as schistosomiasis, filariasis, echinococcosis, strongyloidiasis, ascariasis, hookworm disease and trichinosis. IgE levels greater than 1,000 IU per ml are almost always found in patients with allergic bronchopulmonary aspergillosis, where the level of total serum IgE correlates with the activity of the disease. The IgE level may rise before a clinically defined exacerbation and subsequently fall with appropriate treatment.

Elevated serum IgE levels have also been reported in certain patients with Churg-Strauss syndrome, Wegener's granulomatosis, chronic eosinophilic pneumonia, Hodgkin's disease, sporadic bronchiolitis, childhood renal disease with proteinuria, and the hypereosinophilic syndrome. The significance of the elevated IgE levels in the development of these illnesses is largely unknown. However, in the hypereosinophilic syndrome, patients with elevated IgE levels tend to possess